R20 Regulation *Subject code:3P4AB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech IV Semester Supplementary Examinations, July 2024

Engineering Geology

(CE)

Maximum Marks: 70 Date:20.07.2024 Duration: 3 hours

Note: 1.This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

	Part-A		
All the following questions carry equal marks (10X2M=20 Marks)		CO	Bloom Tx
1	Write about the biological weathering?	1	L1
2	Define Geohydrology.	1	L1
3	What is the crystallography?	2	L1
4	Define the minerology.	2	L1
5	Explain the sedimentation process.	3	L2
6	Mention the structure of metamorphic rocks.	4	L2
7	What the recumbent fold?	3	L2
8	Explain the outcrop.	5	L2
9	Define the unconfined aquifer.	5	L2
10	Define the dam.	3	L1
	Part-B		
Answer All the following questions. (5X10M=50Marks)			
11	What are the types of geological agents? Describe briefly the natural agencies. (10M)	1	L2
	OR		
12	Give a brief account of the importance of geology in civil engineering. Explain your answer by giving suitable example. (10M)	1	L1
13	a. What are the types of the silicates? classify and explain with neat diagram. (6M) b. What is a cleavage in minerals? Mention types of the cleavage. (4M)	2 2	L2 L2
	OR		
14	Describe the physical properties of minerals (i)Calcite (ii)Galena (10M)	2	L1
15	Explain how are the sedimentary rocks formed? Describe the various structures present in the rocks. (10M)	3	L2
	OR		

16	a) Define the Porphyritic and poiklitic texture in igneous rocks. (7M) b) What are the types of Granite? (3M)	3	L2
17	a) Effects enumerate the classification and causes of landslides. (5M) b) How are folds classified? Describe different types of folds. (5M)	4 4	L2 L2
	OR		
18	Explain the types faults and thrust fault with case study. (10M)	4	L2
19	Explain engineering geological consideration in tunneling? Write the purpose of tunneling. (10M)	4	L2
	OR		
20	What are the geological considerations for successful reservoir? (10M)	5	L2